REMC Comments on SCT Directive 10

10. ERCOT shall study price formation issues to determine whether, to avoid the flows over the DC ties adversely affecting price formation in the ERCOT wholesale market or otherwise causing outcomes inconsistent with a properly functioning energy market, any changes to pricing within the ERCOT market during emergencies are necessary. ERCOT shall certify to the Commission when it has completed these actions.

As long as price formation is properly addressed for any load or generation in ERCOT, the flows over the DC ties cannot adversely affect price formation in the ERCOT wholesale market or otherwise cause outcomes inconsistent with a properly functioning energy market whether during normal operating conditions or during emergencies. For example, when there is an export amount at a particular DC Tie, the LMP at that DC Tie will exactly equal the marginal offer-based cost of supplying that export amount. When there is an import amount at a particular DC Tie, the LMP at that DC Tie will exactly equal the marginal offer-based value of that supply amount.

There does exist concerns over whether the price formation in ERCOT is consistent with a properly functioning energy market during scarcity or emergency conditions. These concerns have nothing to do with DC Tie imports or exports but rather on whether ORDC parameters, shadow price caps, power balance penalty curve, etc., are properly set to reflect scarcity. These concerns are not directly related or exclusive to DC Ties and thus need not be considered as part of this Directive 10.

The only issue that may need to be resolved as it relates to Directive 10 is the price formation issue resulting from out-of-market ERCOT-directed curtailment of DC Tie exports or ordering of emergency imports. To ensure proper system-wide and local price formation when ERCOT curtails DC Tie exports (except for when a DC Tie experiences an Outage or a system operator in a non-ERCOT Control Area requests curtailment) or orders emergency DC Tie imports, these ERCOT out-of-market reliability actions must be:

1. Accounted for in ORDC; and
2. Reflected in LMPs - by using a pricing run similar to the RTRDPA run but that determines each LMP and not a system-wide adder (or Extended LMP approach).
3. Until 2 is implemented, reflected in Real-Time Reliability Deployment Price Adder (RTRDPA).

It's important to ensure proper system-wide and local price formation for proper functioning of the market. For example, an entity may procure power at the tie in DAM at $1,000/MWh to export over the ties. Then in Adjustment Period, the export is curtailed either for system-wide capacity issue or local transmission issues and as a result of the curtailed export load, absent changes mentioned above, the RTM price at the tie could drop below $1,000/MWh (say to $600/MWh). Then the exporting entity not only loses its benefits from the export being curtailed

but also incurs a loss of $400/MWh due to the DAM-RTM settlement process. If the curtailment is due to local transmission issues, then item 2 above is needed for proper price formation. Only if item 2 is not implemented, then item 3, that does not address the local price formation issue, may be implemented to at least reflect the ERCOT out-of-market action in the RTRDPA.